

REMARKS

Applicants once again respectfully request that the Examiner state whether the drawings are acceptable.

Applicants have amended claims 5 and 10 in line with the Examiner's suggestion, in an attempt to put this application in condition for allowance.

Accordingly, claims 1-5 and 10-13 remain pending in the application.

Reexamination and reconsideration of the present application are respectfully requested in view of the amendments above and the remarks below.

REQUEST TO WITHDRAW FINALITY OF OFFICE ACTION

The M.P.E.P. states that:

“Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p).”

M.P.E.P. § 706.07 (emphasis added).

In this case, for the first time, the “Final” Office Action dated 13 July 2004 rejects claims 1-5 under 35 U.S.C. § 103 as allegedly being unpatentable over Applicants' admitted prior art (AAPA).

No such basis for a rejection of claims 1-5 appeared in any previous Office Action in this case.

This is a new grounds for rejection of claims 1-5. This new grounds for rejection was absolutely **not** necessitated by any amendment to claims 1-5, since claims 1-5 were not previously amended at all.

Therefore, Applicant respectfully submits that the “Finality” of the Office

Action dated 13 July 2004 is improper.

Accordingly, for at least this reason, Applicant respectfully requests that the Examiner withdraw the holding of Finality of the Office Action dated 13 July 2004.

35 U.S.C. § 102 & 103

The Office Action rejected: claims 1-3 and 5 under 35 U.S.C. § 102 over Schneider et al. U.S. Patent 6,263,829 ("Schneider"); claim 4 under 35 U.S.C. § 103 over Schneider in view of Sakai U.S. Patent 3,717,439 ("Sakai"); and claims 1-5 and 10-13 under 35 U.S.C. § 103 over AAPA.

Applicants respectfully submit that claims 1-5 and 10-13 are all patentable over the cited art for at least the following reasons.

Claim 1

Among other things, the apparatus of claim 1 includes at least three cleaning gas nozzles provided at regular intervals and extending horizontally from a vertical sidewall of the chamber around the chuck.

Applicants respectfully submit that Schneider does not disclose any apparatus. Schneider clearly shows in all of the embodiments - except that shown in FIGs. 8 and 9a - that the gas nozzles are provided on the support 20, not the chamber 15. Meanwhile, in the embodiment shown in FIG. 8 and FIG. 9a, the nozzles are clearly not provided on a vertical sidewall of the chamber 15.

Therefore, Applicants respectfully submit that claim 1 is patentable over Schneider.

Applicants also respectfully submit that an apparatus including such features is patentable over the AAPA.

The Office Action states that mere duplication of parts has no patentable significance, citing In re Harza. However Applicants have not recited a mere duplication of parts. Rather, Applicants have recited that at least three cleaning gas nozzles are provided at regular intervals on the vertical sidewall. Indeed, this is similar to claim 7 in the patent application at issue in In re Harza, which the Court

found patentable over the cited art, wherein the Court held that the plurality of ribs themselves did not confer patentability to claim 1, but the recitation of a positional relationship (“each rib being substantially as high as the spacing between adjacent ribs”) did confer patentability to claim 7. Here, Applicants have recited that at least three cleaning gas nozzles are provided at regular intervals on the vertical sidewall. Applicants have also discovered and disclosed that such an arrangement provides remarkable advantages over the prior art, namely, the cleaning gas is thereby uniformly distributed in all directions to more effectively clean the chamber and prevent damage to wafers from polymers dropping from internal walls of the chamber onto the wafers (see, e.g., paragraphs [00040], [00010]-[00011], and [00035]).

Accordingly, for at least these reasons, Applicants respectfully submit that claim 1 is patentable over Schneider.

Claims 2-3 and 5

Claims 2-3 and 5 depend from claim 1 and are all deemed patentable for at least the reasons set forth above with respect to claim 1.

Claim 4

Claim 4 depends from claim 1. Applicants respectfully submit that Sakai does not remedy the shortcomings of Schneider with respect to claim 1. Accordingly, Applicants respectfully submit that claim 4 is patentable over any possible combination of Schneider and Sakai for at least the reasons set forth above with respect to claim 1.

Furthermore, Applicants respectfully submit that AAPA does not show or suggest a cleaning gas nozzle bent in a spiral form toward a center portion of the chamber.

Claim 10

Among other things, the apparatus of claim 10 includes a plurality of process gas nozzles disposed on a sidewall of the chamber for providing a process gas into the chamber, and at least three cleaning gas nozzles provided at regular intervals and extending horizontally from a vertical sidewall of the chamber spaced apart laterally

from the chuck for providing a cleaning gas into the chamber, wherein the cleaning gas nozzles are all disposed below the process gas nozzles in the chamber.

Applicants respectfully submit that an apparatus including such features is patentable over the AAPA.

The Office Action states that mere duplication of parts has no patentable significance, citing In re Harza. However, as explained above with respect to claim 1, Applicants have not recited a mere duplication of parts. Rather, Applicants have recited that at least three cleaning gas nozzles are provided at regular intervals on the vertical sidewall. Applicants have also discovered and disclosed that such an arrangement provides remarkable advantages over the prior art, namely, the cleaning gas is thereby uniformly distributed in all directions to more effectively clean the chamber and prevent damage to wafers from polymers dropping from internal walls of the chamber onto the wafer. Again, as explained above with respect to claim 1, In re Harza held that these are the kinds of features which do indeed confer patentability over the prior art.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 10 is patentable over the AAPA.

Claims 11-13

Claims 11-13 recite similar features to those recited in originally filed claims 2-4 and all depend from claim 10. Accordingly, for at least the reason set forth above with respect to claim 10, Applicants respectfully submit that claims 11-13 are all patentable over the cited prior art.

Furthermore, Applicants respectfully submit that AAPA does not show or suggest a cleaning gas nozzle bent in a spiral form toward a center portion of the chamber, as recited in claim 13.

CONCLUSION

In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 1-5 and 10-

13, and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (703) 715-0870 to discuss these matters.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 50-0238 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17, particularly extension of time fees.

Respectfully submitted,

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Date: 10 September 2004

By:


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